

## WHAT SHOULD I EXPECT AFTER THE INJECTION?

You may notice some reduction in your pain for the first 1-2 hours after the injection if local anesthetic is injected with the steroid. When this anesthetic wears off, your pain might return as it was before the procedure. Pain relief with ESI may take up to one week to manifest, but some patients experience improvement before or after this time frame. Additionally, some patients have some mild transient aggravation of their symptoms, particularly in the arm or leg, if arm or

## SOME PATIENTS HAVE SOME MILD TRANSIENT AGGRAVATION OF THEIR SYMPTOMS, PARTICULARLY IN THE ARM OR LEG



leg pain was present previously. This could be a sign that the injected medicine has successfully reached the target nerves. Please follow the post procedure instructions if new or severe pain or other symptoms develop after your procedure.



## COULD THERE BE SIDE EFFECTS OR COMPLICATIONS?

Minor side effects from the injected medication are not uncommon and can include nausea, itching, rash, facial flushing and sweating. As noted above, some patients notice a mild increase or worsening of their pain for the first day or two after injection. Diabetic patients may notice a rise in blood sugar due to the steroid contained in the injection. Please check with your primary care physician or internist regarding this prior to having the procedure. If you are on blood thinners please check with your physician as you will need approval to temporarily discontinue these medications prior to your ESI. Fortunately, epidural steroid injections have an extremely good safety profile, and serious complications are quite rare. Your doctor will discuss these issues with you, and you will be asked to carefully read and sign a consent form before any procedure is performed.



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## PATIENT INFORMATION FOR EPIDURAL STEROID INJECTIONS

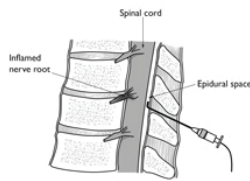


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Your physician's have advised you undergo an epidural steroid injection (ESI). These may be recommended for the pain you are experiencing in either your neck or low back caused by inflammation surrounding the nerves. They are particularly helpful for the radiating pain in your arm or leg (often related to radicular pain, or "sciatica").

### WHAT IS AN EPIDURAL STEROID INJECTION?

An epidural steroid injection is a simple, safe, and effective non-surgical treatment that involves the injection of a steroid medication, a "cortisone like" substance, into the epidural space of the spine (see diagram below).



The epidural space is the area of the spine that is inside the vertebral column, but outside the spinal cord, where inflamed nerves and other structures that cause pain are located. The

intent of this procedure is to reduce inflammation and relieve pain. Performed by an anesthesiologist or specialist in interventional pain medicine, an ESI is a 5-10 minute procedure used to relieve a variety of painful conditions, including chronic pain anywhere in the spine.

## INFLAMMATION IN THE SPINE CAUSES PAIN



### HOW DOES INFLAMMATION IN THE SPINE CAUSE PAIN?

Studies of the intervertebral disc have shown that it contains a number of chemicals that are very potent mediators of inflammation. With injury or disc degeneration, the outer layer of a disc (annulus fibrosis) can develop a tear allowing inflammatory chemicals in the center of the disc (nucleus pulposis) to leak out and reach nerve roots and other pain carrying nerves located behind the disc. When nerves are exposed to these inflammatory chemicals, they become swollen and painful and are much more active in transmitting pain signals.

### WHAT TYPES OF CONDITIONS WILL RESPOND TO ESI?

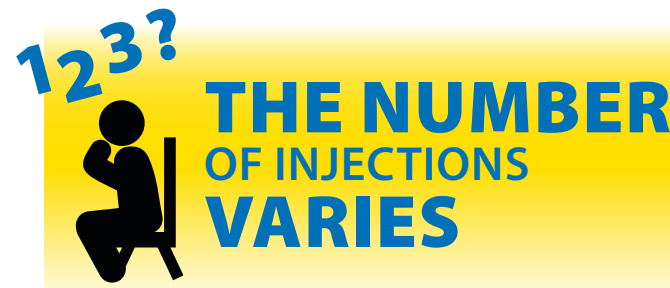
For over 60 years, ESI's have been used to treat chronic neck and back pain as well as a variety of other conditions. The most common problems treated successfully with ESI include herniated or bulging discs, spinal stenosis and recurrent pain following surgery. Patients who respond best are those with pain that radiates into an extremity due to nerve root inflammation.

### HOW IS THE INJECTION PERFORMED?

ESI's are performed with fluoroscopy (X-ray guidance) with the patient laying on his/her stomach. The injection is performed under local anesthesia and, on occasion, with intravenous sedation. Patients are not deeply sedated or completely asleep for this procedure because it is unnecessary and in some cases dangerous. The injection usually takes 5-10 minutes, followed by a brief recovery before discharge home. Procedures are usually performed in an outpatient setting in the office or in an outpatient surgery center.

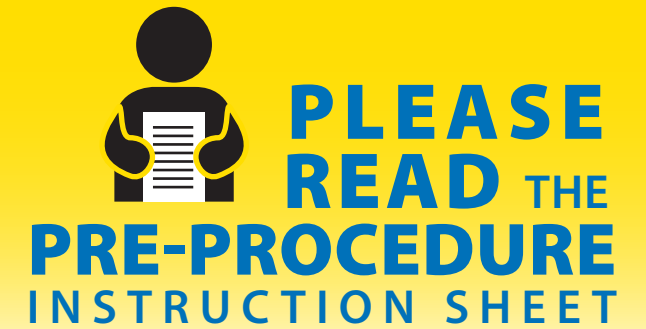
### HOW MANY INJECTIONS WILL I NEED?

A typical ESI series consists of three injections performed two weeks apart. However, physicians and insurance companies understand there is no scientific basis for a series of three injections. The actual number of injections authorized by your insurance may be less than three. The number of injections varies depending on response to treatment. If one has no pain following the first injection, additional treatment may not be necessary. Alternately, if one has absolutely no pain relief after two injections, a different treatment may be recommended. Please note that the alternatives to an ESI may, in some cases, involve a different injection procedure such as a facet joint injection, sacroiliac joint injection or a different type of nerve block.



### WHAT ARE THE CHANCES TREATMENT WILL HELP MY PAIN AND CAN THEY BE REPEATED?

Most studies show that ESI relieves pain for 50% or more of well selected patients. The degree and duration of pain relief are variable and depend on many different factors, including the nature of the condition responsible for pain, duration of symptoms before treatment, whether previous back/neck surgery and been performed and other factors. ESI's can be repeated if it was helpful for your pain in the past. Although there is some flexibility in the timing of repeat treatment, your physician will probably want to wait for at least 4 to 6 months after your last injection.



### WHAT SHOULD I DO TO PREPARE FOR MY INJECTION?

Please read the Orlando Orthopaedic Center pre-procedure instruction sheet for everything you will need to do to prepare for treatment. Please make sure you understand its contents prior to signing.

### WHAT SHOULD I DO AFTER MY INJECTION?

Follow all the instructions on your post procedure instruction form. Following discharge home, you should plan on simple rest and relaxation. If you have pain at the injection site, application of an ice pack to this area should be helpful. If you received intravenous sedation, you should not drive a car for at least 8 hours. Patients are generally advised to go home and not return to work after this type of injection. Most people return to work the next day.

